Paper No. 33

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte WALTER SIEGL and ANDREAS HELFENSTEIN

Appeal No. 2002-0585
Application No. 09/088,307

HEARD: February 5, 2003

Before KRASS, RUGGIERO and BARRY, Administrative Patent Judges.

KRASS, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the final rejection of claims 2-12 and 21-32. Claims 13-20 are considered by the examiner as being directed to allowable subject matter and are no longer part of this appeal.

The invention is directed to the control of a printing press having a plurality of print positions. Each position prints a

different color and the images printed by each position overlap on a web so that a full color image is formed when the web leaves the printing press. The instant invention pertains to precisely aligning the individual images in order to form the full color image.

Representative independent claim 31 is reproduced as follows:

31. A process for register coordinating cylinders of a web-fed rotary printing press, the process comprising the steps of:

providing a web;

printing on one side of said web with a first cylinder print group;

driving said first cylinder print group with a first motor;

printing on said one side of said web with a second cylinder print group;

driving said second cylinder print group with a second motor;

sensing a registry of said first and second cylinder print groups and generating a registration signal;

providing a controller for coordinating an angular position of said second cylinder print group in register with said first cylinder print group according to one of a plurality of control characteristics, said controller receiving said registration signal and actuating one of said motors;

changing a production condition from a first production condition to a second production condition;

detecting said second production condition;

changing said one of said control characteristics to another said control characteristic based on said second production condition.

The examiner relies on the following references:

Anselrode	4,366,542	Dec. 28, 1982
Palmatier et al. [Palmatier}	5,127,324	Jul. 07, 1992

Additionally, the examiner relies on admitted prior art [APA] in appellants' statement, at page 15 of Paper No. 11, regarding the disclosure of a PID controller and the values used for the variables/parameters being adequate.

Claims 2-12 and 21-30 stand rejected under 35 U.S.C. 112, first paragraph as "failing to provide adequate written descriptions" [answer-page 4].[1]

Claims 2-12 and 21-32 stand rejected under 35 U.S.C. 103. As evidence of obviousness, the examiner cites Palmatier and Anselrode with regard to claims 31 and 32, adding APA with regard to claims 2-12 and 21-30.

---

[1]While the statement of the rejection would appear to rely on the "written description part of 35 U.S.C. 112, first paragraph, the rationale for the rejection makes it clear that the examiner is relying on the "enablement" portion of 35 U.S.C. 112. Accordingly, we will treat the rejection as being one of lack of enablement.

Reference is made to the briefs and the answer for the respective positions of appellants and the examiner.

OPINION

Turning first to the rejection under 35 U.S.C. 112, the examiner contends that the claimed k and k_{basis} parameters are not adequately defined in the specification and that one cannot determine the scope of these terms from the disclosure "beyond the fact that a PID controller is somehow used" [answer-page 4].

As a matter of Patent Office practice, a specification disclosure which contains a teaching of the manner and process of making and using the invention in terms which correspond in scope to those used in describing and defining the subject matter sought to be patented *must* be taken as in compliance with the enabling requirement of the first paragraph of 35 U.S.C. 112 *unless* there is reason to doubt the objective truth of the statements contained therein which must be relied on for enabling support. Assuming that sufficient reason for such doubt does exist, a rejection for failure to teach how to make and/or use will be proper on that basis; such a rejection can be overcome by suitable proofs indicating that the teaching contained in the

specification is truly enabling, In re Marzocchi, 439 F.2d 220, 169 USPQ 367 (CCPA 1971); In re Sichert, 566 F.2d 1154, 196 USPQ 209 (CCPA 1977).

Moreover, if an examiner had a reasonable basis for questioning the sufficiency of the disclosure, it was incumbent on appellants to come forward with evidence, if they could, to rebut the examiner's position. In re Buchner, 929 F.2d 660, 18 USPQ2d 1331 (Fed. Cir. 1991).

In the instant case, the teaching by the specification, e.g., pages 22-24, regarding parameters k and k_{basis}, clearly corresponds in scope with the claimed parameters. Appellants have explained, convincingly in our view, that these parameters are merely coefficients corresponding to the proportional, derivative and integral factors in the well known equation describing the operation of a PID controller. As further explained by appellants, e.g., pages 2-4 of the reply brief, these factors are chosen in order to have the particular system operate properly, the actual determination of specific values constituting the well-known "tuning" of a PID controller, and, since each system is different, it would be useless to provide specific values for these parameters.

It appears to us that the artisan skilled in the art of PID controllers would have no trouble determining the specific parameters to be used in a specific system by tuning the PID controller, the actual determination being no more than routine experimentation.

The examiner's response is to call for specific values of the parameters but this demand is not reasonable in view of each particular system having different tuned parameters. The examiner also argues that for the artisan to determine those parameters would constitute undue experimentation. However, we find this argument unreasonable in view of the notoriety of PID controllers and the routine manner known to artisans as to how to tune the system to achieve the optimum values for the parameters, or coefficients for the proportional, derivative and integral factors in the PID controller equation.

Accordingly, since we find that the examiner did not have a reasonable basis for challenging the sufficiency of the instant disclosure or, to the extent there was a reasonable basis, that appellants' argument has clearly convincingly rebutted the challenge, we will not sustain the rejection of claims 2-12 and 21-30 under 35 U.S.C. 112, first paragraph.

We turn now to the rejection of claims 31 and 32 under 35 U.S.C. 103.

It is the examiner's position that Palmatier teaches the recited structure, including a web 12, cylinder print groups 20, 30, 40, 50, motors 34, 44, 54, using a control system 70 to control the motors to maintain preset angular positions of the cylinders, and wherein the velocity of one of the cylinder groups is used as a disturbance variable to generate a command variable for controlling/correcting the speed of the other print groups to bring them back into the press.

The examiner admits that Palmatier is not clear as to presetting the typical register deviation as a function of the disturbance variable in a form of at least one characteristic, and it is not clear as to exactly what is meant by this language. But, the examiner contends, Palmatier does directly relate the angular position of the plate cylinder with the velocity of the press.

Moreover, the examiner contends, Anselrode teaches "this concept to speed up print processes for repeat jobs" [answer-pages 5-6]. The examiner concludes that it would have been obvious "to have so controlled the Palmatier...system for the same reasons" [answer-page 6]. The examiner further points to

the abstract of Palmatier, noting that "the angular position of a cylinder in a first print group is compared to the angular position of a cylinder in other print groups in the press operating at speed to maintain registration of the multiple print groups when the first cylinder is put back into operation in the running press" [answer-page 6].

Appellants argue that claim 31 requires the changing of a control characteristic to another characteristic based on a change in production conditions and that Palmatier fails to teach changing a control characteristic of a controller based on any change in a production condition.

However, the examiner points out, reasonably, in our view, that Palmatier runs at various speeds and that appellants (specification-page 5) indicate that web velocity may be a production condition. Accordingly, if the press speed in Palmatier is changed, there is a change in production control. When this production control characteristic is changed, a speed reference signal is generated, indicative of this change in Palmatier and an adjustment control signal is then changed in response to this reference signal. Therefore, concludes the examiner, there is a change in control characteristic based on the change in a production condition, as claimed.

While appellants argue that Palmatier teaches no change in a control characteristic of a controller, based on a change in a production condition, appellants have presented no convincing argument as to why the examiner's interpretation of speed change as a change in control characteristic of a controller based on a change in a production condition is in error.

Appellants argue that in Palmatier, the process control computer 70 is programmed and, once programmed, the program runs continuously and there is no change in the way the process control computer operates or behaves. However, claim 31 does not preclude the use of a programmed computer and there is nothing in the claim language that requires a change in the way a process control computer operates.

While appellants also argue that there is no suggestion to modify one of the applied references in any way with the other, it is unclear what is missing from Palmatier that needs to be modified by Anselrode.

In the reply brief, appellants argue that the control systems of the applied references do not adjust the registration, but instead adjust positions of screen templates, doctor blade positions and doctor blade pressure, as well as setting with regard to the feed of the printing ink. Accordingly, argue

appellants, the references teach away from the instant claimed invention.

It appears to us, from the abstract of Palmatier ("A register mark error sensor provides an adjustment control signal indicating that the plate cylinder should be adjusted"), from column 3, lines 43-45, of Palmatier ("...adjusts the angular position of the corresponding one of the plate cylinders...relative to the corresponding one of the blanket cylinders"), and from column 4, lines 4-6, of Palmatier ("Each of the register mark sensors...provides a respective register mark error signal on a respective signal line..."), that Palmatier does, indeed, provide for adjustment of registration, or "coordinating an angular position...," as broadly set forth in instant claim 31.

Because the examiner appears to have set forth a reasonable case of obviousness which has not been overcome by any convincing argument by appellants, we will sustain the rejection of claims 31 and 32 under 35 U.S.C. 103.

We will not, however, sustain the rejection of claims 2-12 and 21-30 under 35 U.S.C. 103 because these claims require changes in controller parameters and/or wherein the controller is a PID controller. The mere reliance on APA for a showing that

PIDs were old and well known does not, per se, make it obvious, within the meaning of 35 U.S.C. 103, to provide for such a PID controller or a change in controller parameters in a web-fed rotary printing press, as claimed.

CONCLUSION

We have not sustained the rejection of claims 2-12 and 21-30 under either 35 U.S.C. 112, first paragraph, or under 35 U.S.C. 103. We have, however, sustained the rejection of claims 31 and 32 under 35 U.S.C. 103.

Accordingly, the examiner's decision is affirmed-in-part.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

AFFIRMED-IN-PART

ERROL A. KRASS Administrative Patent Judge	)	
JOSEPH F. RUGGIERO Administrative Patent Judge	)	BOARD OF PATENT APPEALS AND INTERFERENCES
LANCE LEONARD BARRY Administrative Patent Judge	)	

EK/RWK

MCGLEW & TUTTLE, PC
SCARBOROUGH STATION
SCARBOROUGH, NY 10510